

1 What is claimed is:

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1 1. For use with an electric power-generating device that converts fluid flow of wind or water  
 2 to electricity including a rotor having blades that rotate in response to fluid flow; a main power  
 3 input shaft coupled to said rotor; a single-stage torque-dividing gearbox coupled to said main  
 4 power input shaft; said torque-dividing gearbox having a plurality of output shafts located around  
 5 a perimeter of said main power input shaft; and, a plurality of sub-powertrains, each one of said  
 6 sub-powertrains including a generator coupled to a respective one of said output shafts, a  
 7 controller method comprising:

8 Regulating torque experienced by each said generator to assure that torques are  
 9 balanced between generators at any given system load.

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1 2. The method of claim 1 wherein said regulating step includes controlling local voltage at each  
 2 said generator by a transformer configured as a reactor, in which coils of said transformers are  
 3 wired in parallel and are actively modulated with an SCR, solid-state, switching device.

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1 3. The method of claim 2 wherein each generator is connected to a respective primary coil of a  
 2 transformer and a respective secondary coil is connected to an SCR

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1 4. The method of claim 1 said regulating step includes modifying a slip characteristic of each  
 2 generator to match the generator with the greatest slip.

1 5. The method of claim 4 modifying step includes increasing the rotor resistance to have the  
 2 effect of increasing the slip characteristic of each generator.

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2 6. In a system of mechanically coupled multiple induction generators driven by a single rotor, a  
 3 method of regulating torque experienced by each induction generator to assure that torques are  
 4 balanced between generators at any system load comprising steps of:

5 A. Monitoring torque on each individual generator;

- 6 B. Determining relative torque balance between said multiple generators; and,  
7 C. Modifying torque characteristics of said individual generators to bring said generators into  
8 balance to provide uniform torque load distribution between said multiple generators.  
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